

Metal Casting

Save millions by improving operating efficiency and productivity

BestPractices
ASSESSMENT SUMMARY

Industrial Technologies Program

ENERGY EFFICIENCY AND RENEWABLE ENERGY, U.S. DEPARTMENT OF ENERGY

\$36 Million in Savings Identified in AMCAST Assessment

AMCAST and its partners applied a systematic plant-wide assessment (PWA) methodology to identify energy and cost saving opportunities at the corporation's facility in Wapakoneta, Ohio. The team initially identified \$3.6 million in savings opportunities resulting from increased energy and productivity efficiencies with a payback period of 3 months. Additional savings opportunities surfaced as plant personnel were implementing the initial recommendations, and the total saving opportunities have grown to nearly \$6 million.

Encouraged by these savings, AMCAST has replicated the PWA methodology at five plants throughout the corporation and introduced projects from the assessment into its other plants. AMCAST's strategy is succeeding; company-wide saving will reach nearly \$36 million over the next several years.

The Wapakoneta facility spends millions of dollars and uses energy-intensive processes in its production of low-pressure aluminum castings for automotive suspensions. The team focused the assessment on all energy-intensive plant systems, including furnaces, boilers, electrical equipment, compressed air, fans, and pumps. Scrap reduction also resulted in increased productivity.

DOE funded the assessment at \$75,000 and required at least a matching amount from Anchor. The table below highlights the overall savings opportunities identified.

AMCAST Assessment Savings Identified	Annual Savings
Corporate-wide savings	\$36 million
Wapakoneta plant savings realized	\$6 million
Wapakoneta electrical energy savings	671,907 kWh
Wapakoneta natural gas savings	9,146 MMBtu

Project Partners

AMCAST Industrial Corporation Wapakoneta, OH

Capital Surini Group International

Edison Materials Technology Center

Miami Valley Diagnostics

Ohio Department of Development Office of Energy Efficiency

University of Dayton

To conduct your own Plant-Wide Assessment:

For technical details, visit:

www.oit.doe.gov/bestpractices/ factsheets/amcast.pdf

Or, contact:

Bob Leach, Oak Ridge National Laboratory

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Respond to annual PWA solicitations:

www.oit.doe.gov

For PWA program information, contact:

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